

## Addendum A:

The TMDL developed for the Upper Segment of the Blackwater River was based on the Virginia State Standard for fecal coliform. As detailed in Section 1.2, the fecal coliform standard states that the 30-day, geometric-mean concentration shall not exceed 200 cfu/100 ml. As such, pollutant concentrations were modeled over the entire duration of a representative modeling period, and pollutant loads were adjusted until the standard, reduced by a margin of safety equal to 5%, was met (Figure 5.5). Table AA.1 represents the average annual loads during the modeled period after allocation of pollutant loads. Loads from permitted point sources (WLA) and nonpoint sources (LA) are represented, as are the load associated with the margin of safety (MOS) and the sum of these three loads (TMDL). It is worth noting that the MOS is much less than 5% of the TMDL. This outcome illustrates the inherent difference between concentration, which is the amount of a pollutant (e.g. numbers of fecal coliforms) in a given volume of water, and annual loads, which is the total amount of the pollutant regardless of the volume of water. Additionally, this situation reflects the fact that it would be inappropriate to use annual loads, such as those in Table AA.1, as a target goal for meeting a water quality standard that is based on concentrations.

The Upper Blackwater is fed by the North and South Forks of the Blackwater River. Because of this relationship, water quality improvement in the Upper Blackwater Stream Segment is dependent not only on loads entering from its immediate drainage, but from upstream sources. In Table AA.1, average annual loads are given for the upstream impairments (i.e. South Fork Blackwater and North Fork Blackwater), as well as the Upper Blackwater impairment since the TMDLs for each of these impairments is interdependent. Additionally, the average annual loads for the total drainage area including all of these impairments are reported.

**Table AA.1 Average annual loads (cfu/year) modeled after TMDL allocation in the Upper Blackwater River Watershed.**

<b>Impairment</b>	<b>WLA</b>	<b>LA</b>	<b>MOS</b>	<b>TMDL</b>
South Fork <sup>1</sup>	2.80E+09	4.06E+14	2.57E+12	4.09E+14
North Fork	0.00E+00	9.24E+14	2.98E+12	9.27E+14
Upper Blackwater	0.00E+00	2.01E+15	1.51E+12	2.01E+15
<b>Total</b>	<b>2.80E+09</b>	<b>3.34E+15</b>	<b>7.06E+12</b>	<b>3.34E+15</b>

<sup>1</sup> The only point source permitted for fecal control in the South Fork Blackwater drainage is Calloway Elementary School (VPDES # VA0088561).

## Addendum B:

There is a typographical error in Table 3.10. The third column is incorrectly labeled as "Direct Deposition." The correct label is "Portion of Day in Stream Access Areas," as reproduced correctly in the table below.

**Table 3.10 Average fecal coliform densities and percentage of time spent in stream access areas for wildlife.**

<b>Type</b>	<b>Fecal Coliform Density (FC/gm)</b>	<b>Portion of Day in Stream Access Areas (%)</b>
Raccoon	13,100,000	5
Muskrat	1,900,000	90
Beaver	1,000	100
Deer	3,300,000	5
Turkey	1,332	5
Goose	320	50
Duck	490	75